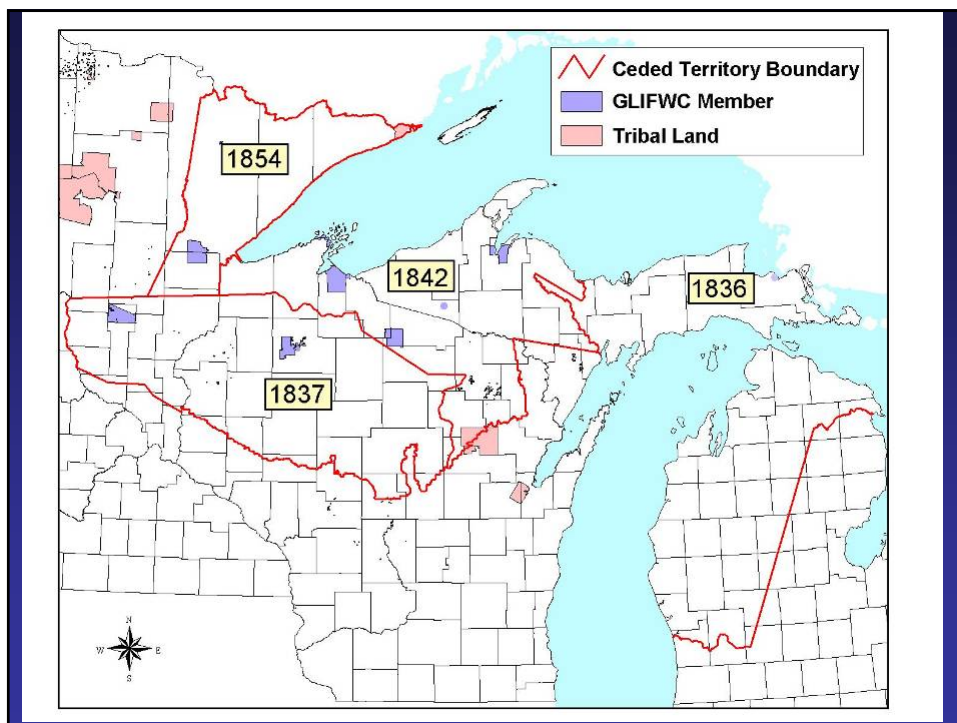
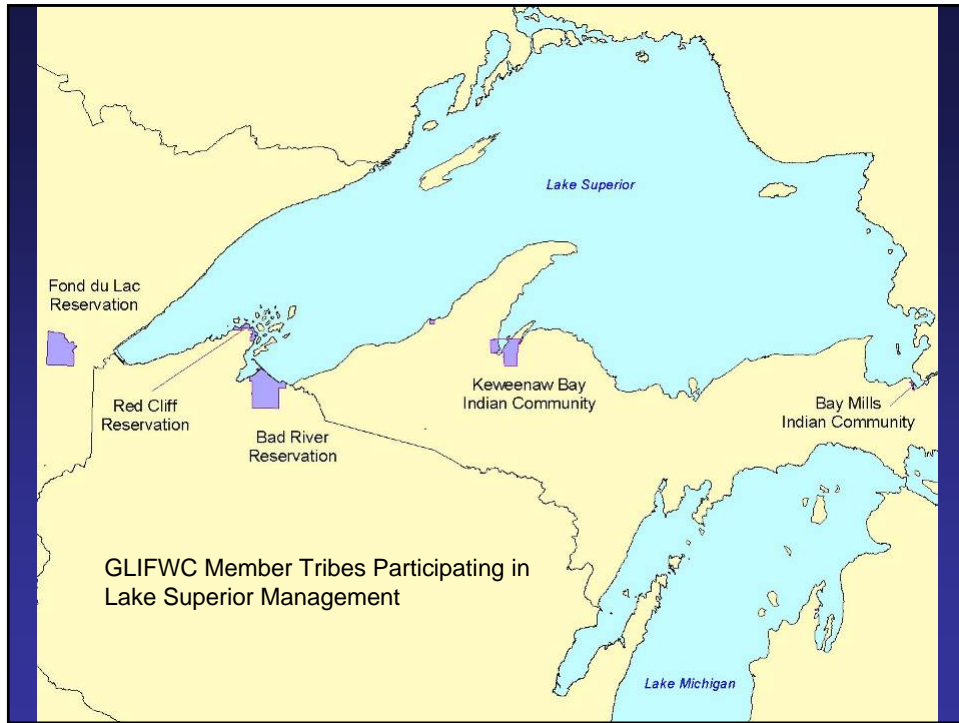


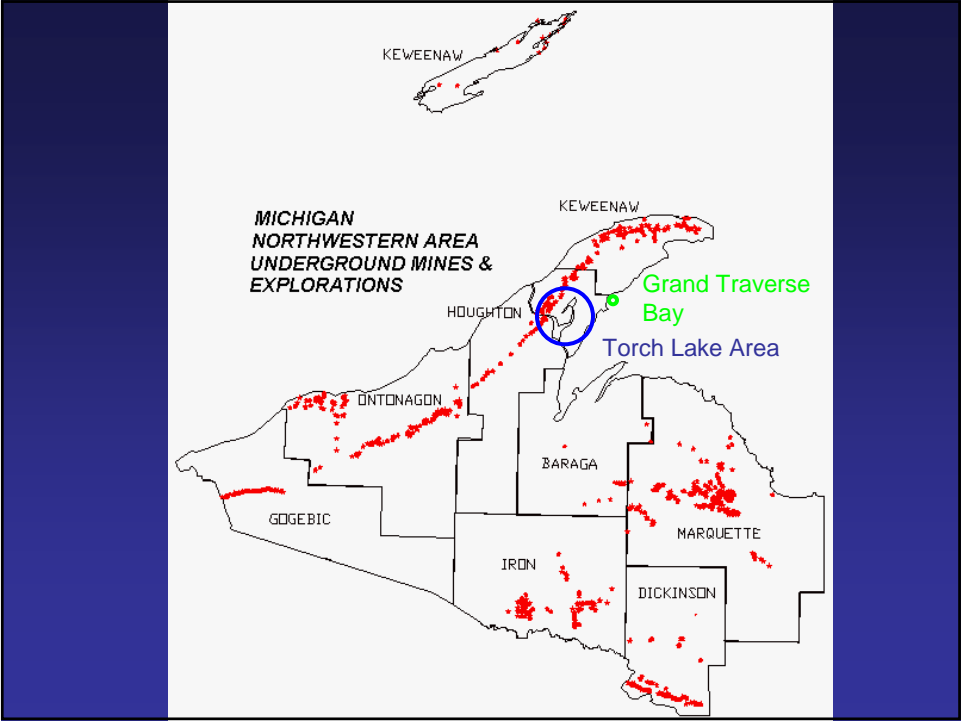
## Monitoring the Distribution and Movement of Mine Wastes in Lake Superior



Esteban Chiriboga  
Great Lakes Indian Fish and Wildlife Commission  
Madison, WI







### MICHIGAN COPPER PRODUCTION

From 1845 to 1990 the total production of Michigan's copper mines totalled 10,768,300,581 pounds or enough copper to make a two lane highway from Houghton to Lansing.

Year	Gross Value Dollars in Millions	Pounds of Copper	¢ Per Pound
1845	\$1	24,880	20¢
1854	\$1	4,074,560	22¢
1864	\$1	12,491,965	46¢
1874	\$1	34,334,389	23¢
1884	\$1	69,353,202	14¢
1894	\$1	114,308,870	09¢
1904	\$1	208,355,935	13¢
1916*	\$1	269,794,531	37¢
1924	\$1	145,333,227	14¢
1934	\$1	48,215,859	08¢
1965	\$1	145,917,439	35¢
1983	\$1	2,111,876	76¢

\* High point in copper production and prices due to World War I

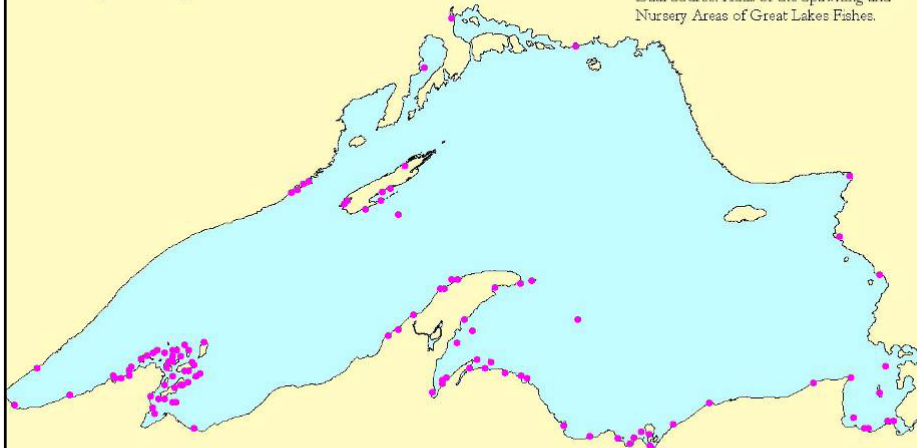


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## Lake Superior Spawning Sites

● Spawning Sites - Lake Whitefish

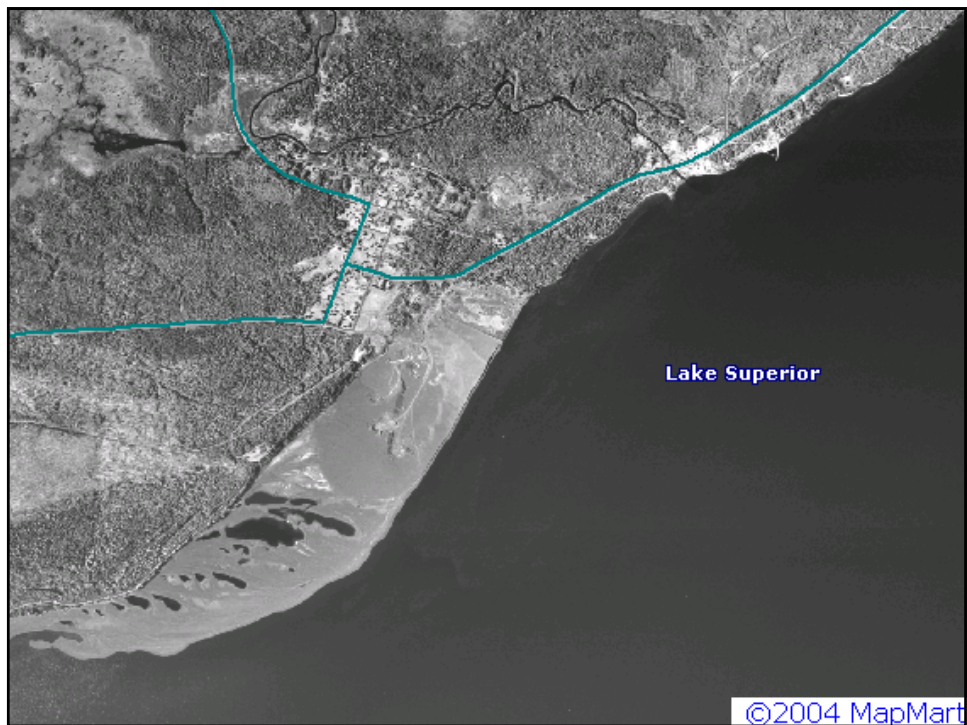
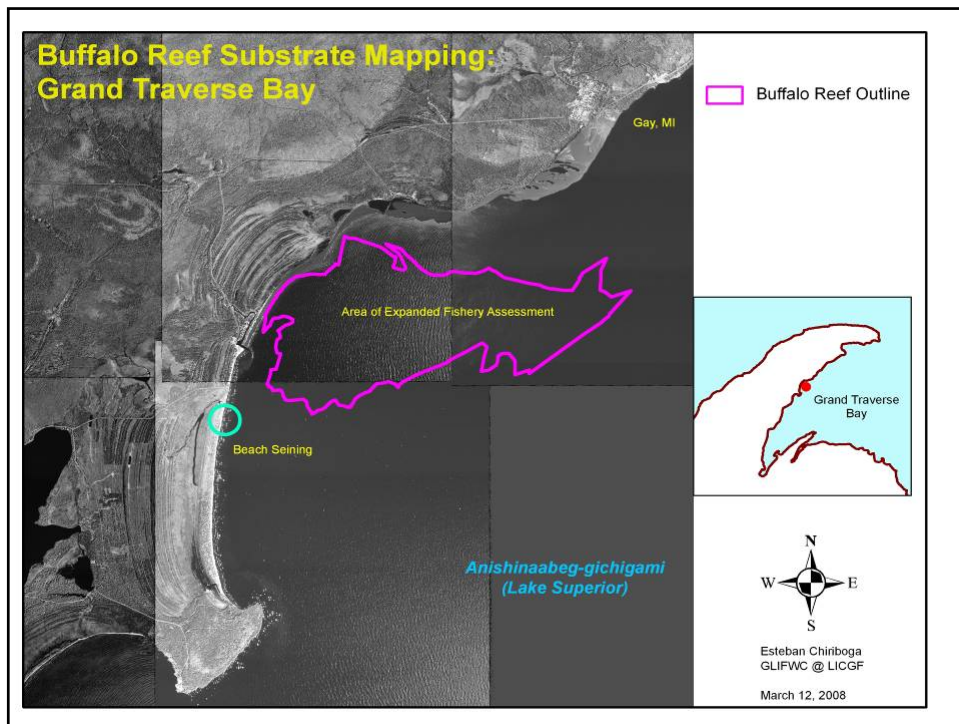
Data Source: Atlas of the Spawning and Nursery Areas of Great Lakes Fishes.

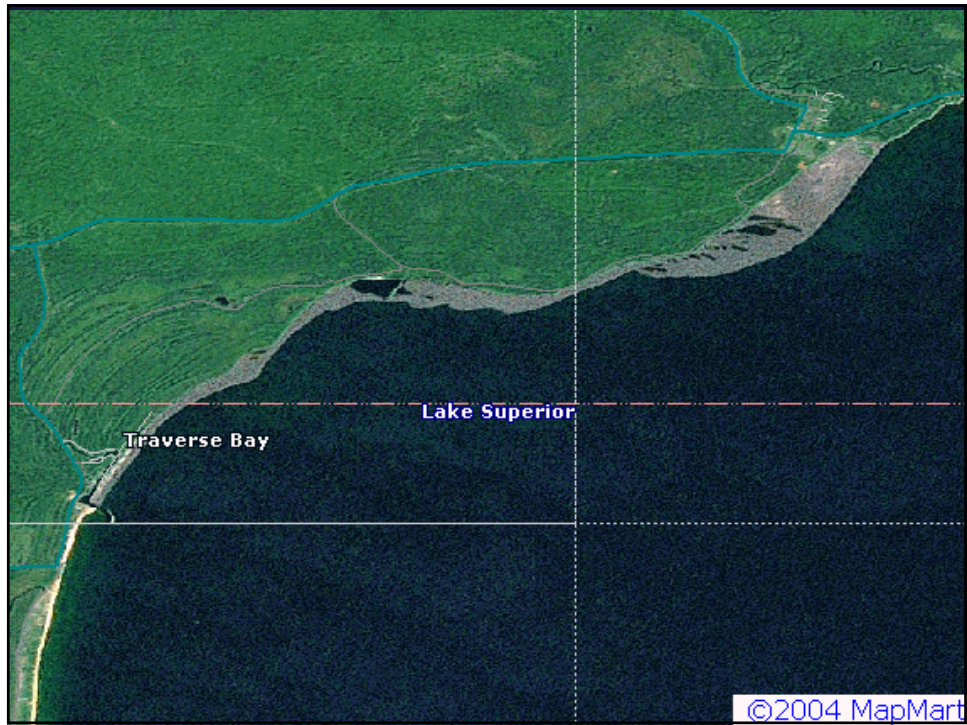


Esteban Chiriboga  
GLIFWC at LICGF

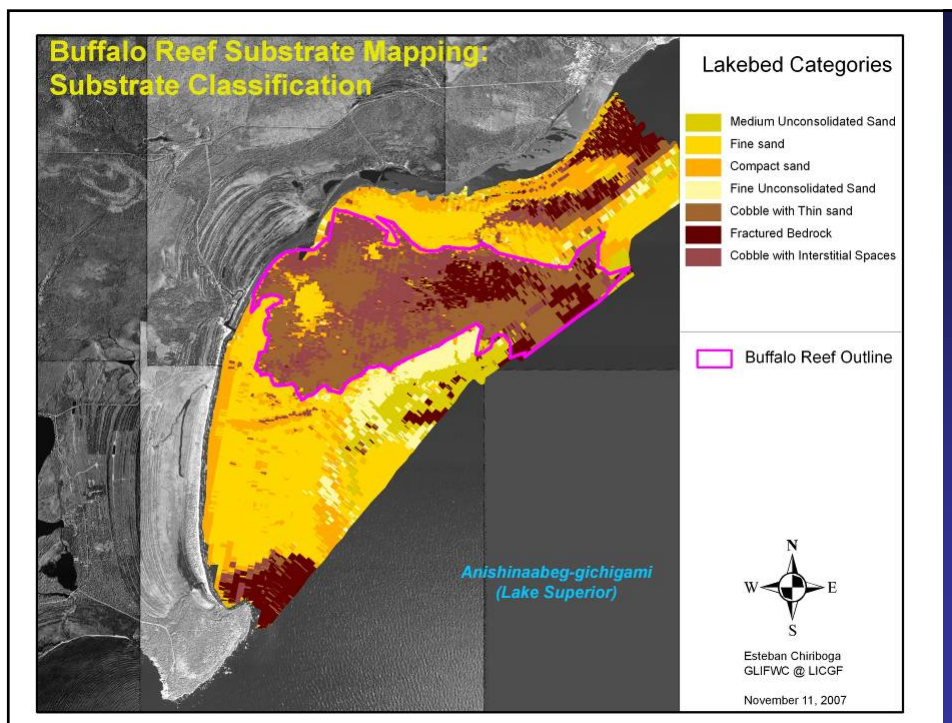
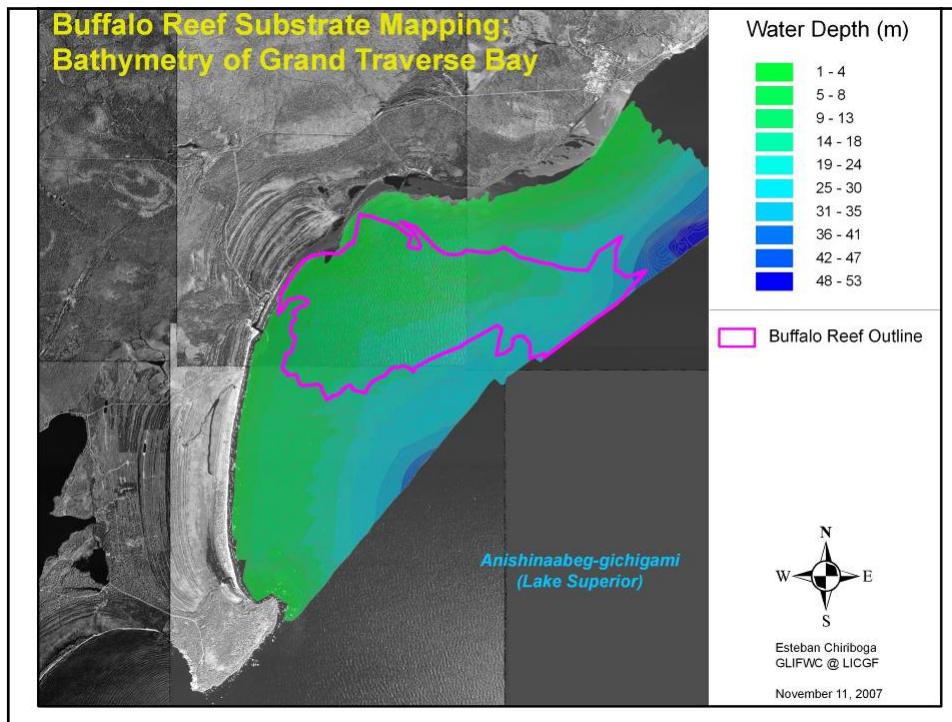


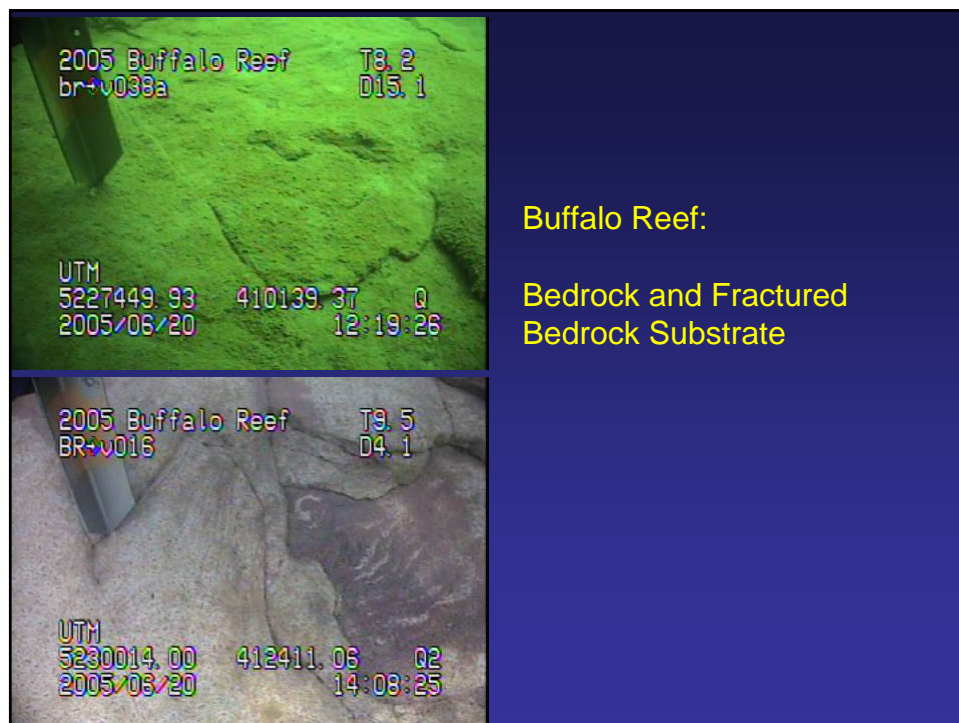
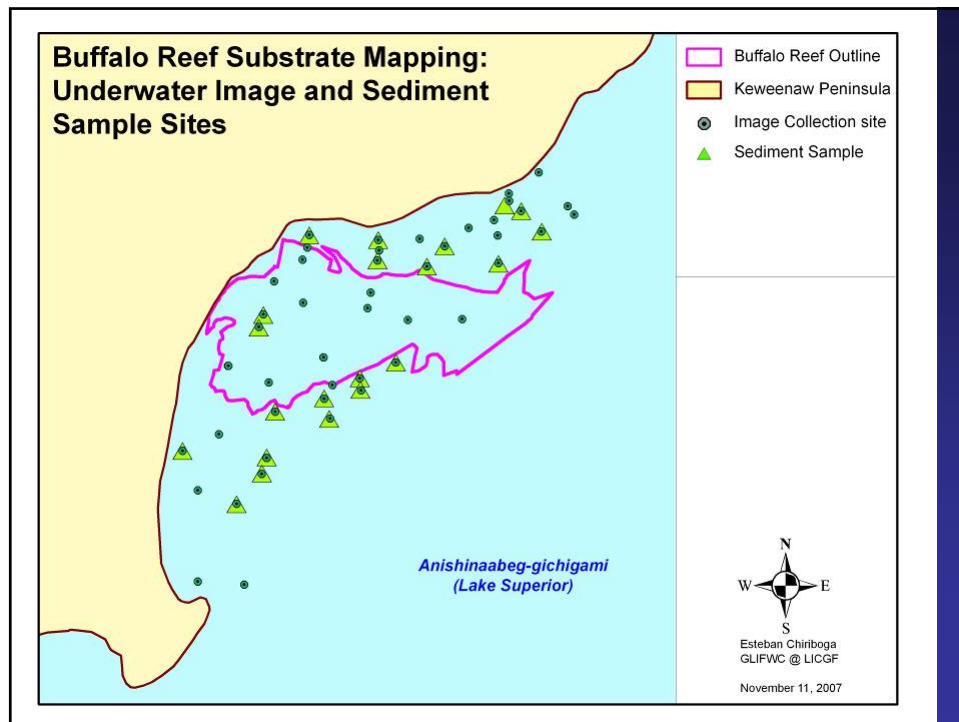




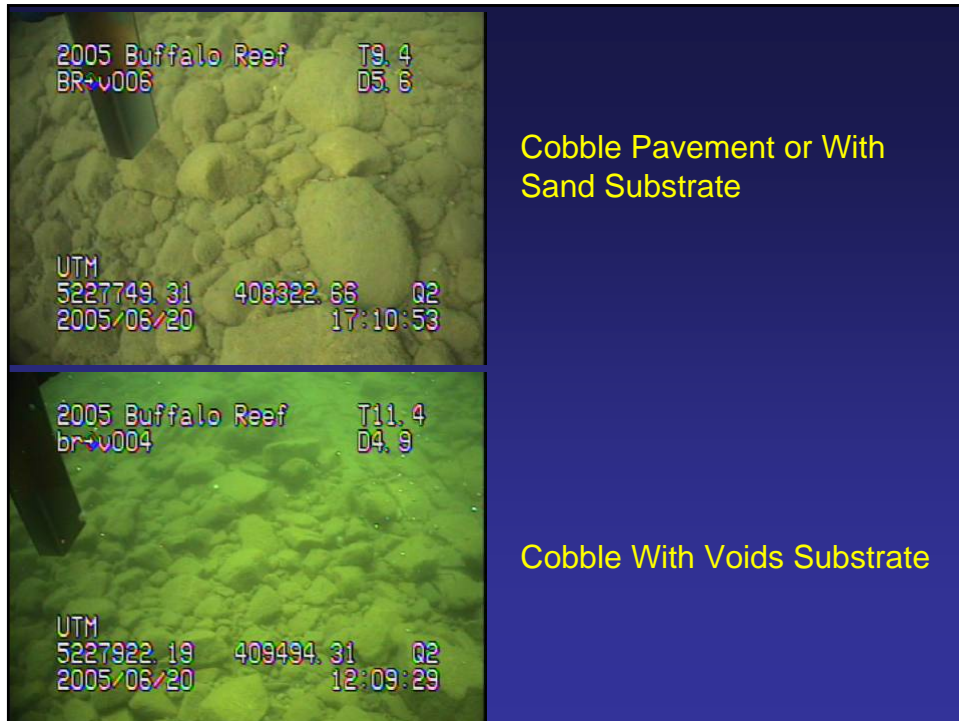


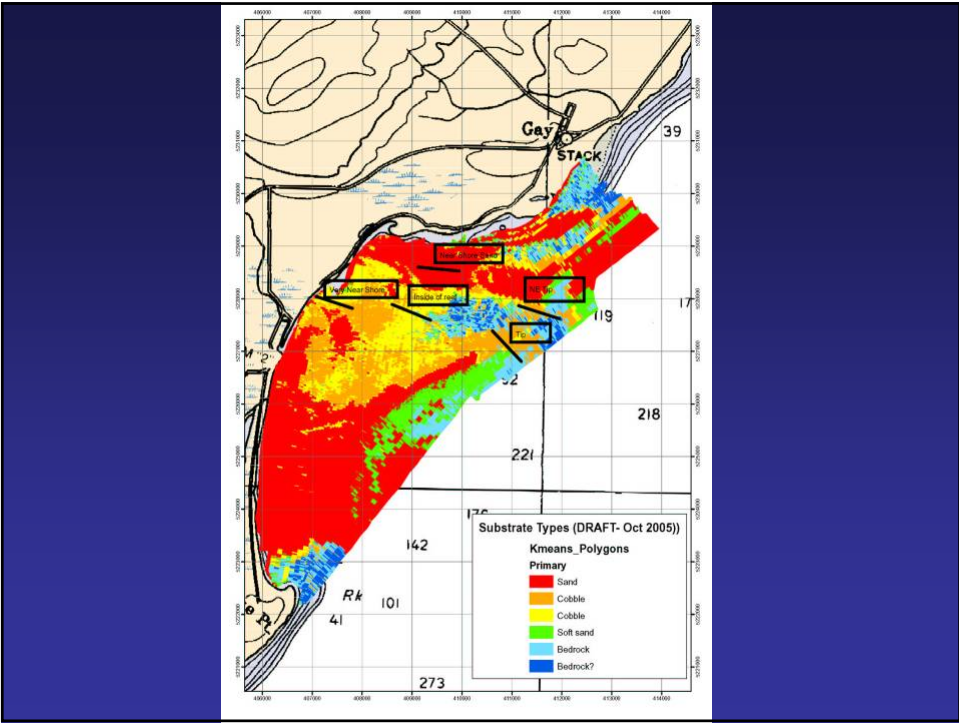






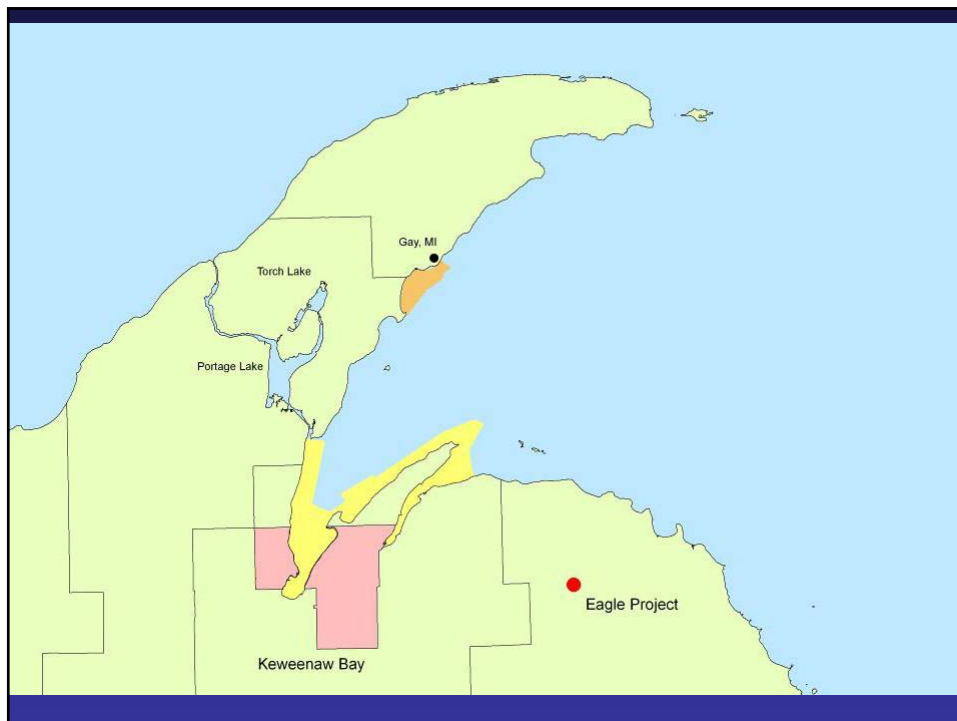
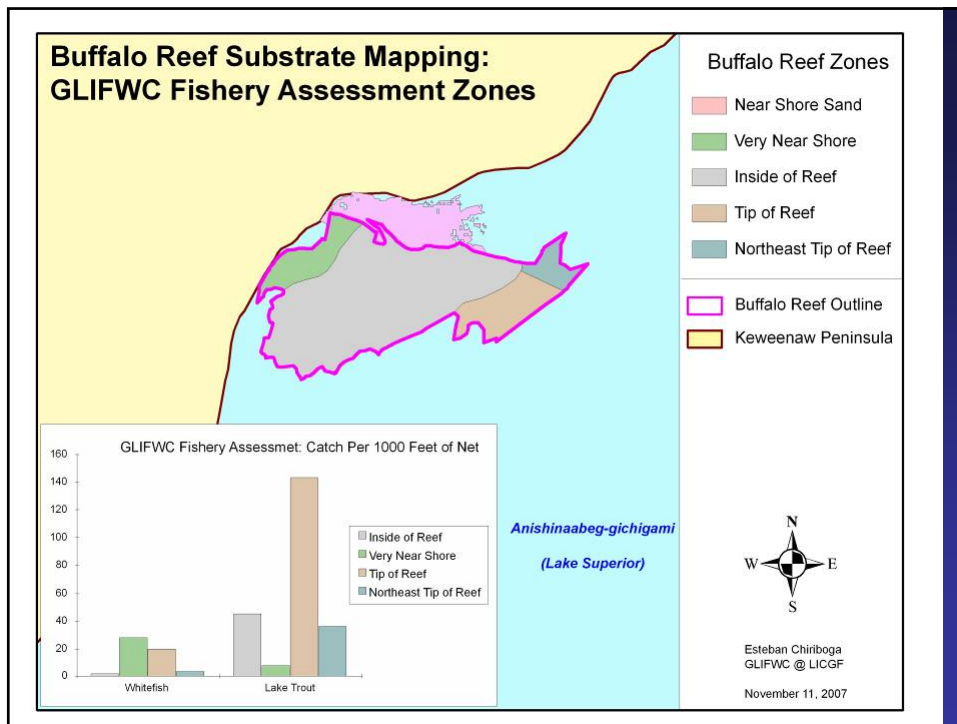






Number captured, gillnet effort (linear feet), and catch per unit effort for lake trout and whitefish sampled in extended fish assessments at the Buffalo Reef project area during 2005.

Species	Area Set	Number Captured	Gillnet Effort	Catch per 1,000 feet
Lake Trout	Inside of Reef	79	1,750	45.1
	NE Tip of Reef	9	250	36.0
	Near Shore Sand	11	2,000	5.5
	Tip of Reef	323	2,250	143.6
	Very Near Shore	2	250	8.0
Whitefish	Inside of Reef	3	1,750	1.7
	NE Tip of Reef	1	250	4.0
	Near Shore Sand	17	2,000	8.5
	Tip of Reef	45	2,250	20.0
	Very Near Shore	7	250	28.0







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